

Integrated Decision and Funding Model

Presentation to
NORTH DAKOTA LEGISLATIVE MANAGEMENT
WATER-RELATED TOPICS OVERVIEW COMMITTEE
April 19, 2012



Integrated funding and decision model supports near-, mid-, and long-term needs

- 💧 Near-term needs: Support local budget and financing decisions for FY13-15
- 💧 Mid-term needs (FY14-20): Develop construction period funding and financing; cash flow requirements and funding sources by entity
- 💧 Long-term needs (FY21 & beyond): Determine debt service levels and multi-generational impacts/affordability

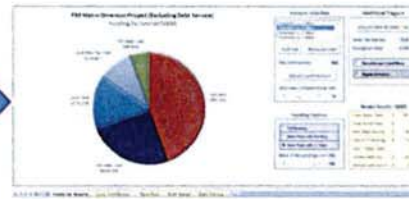
Iterative process and tools enable informed implementation decisions

Cost-loaded Schedule



- Project Activities
- Implementation Logic
- Costs by Quarter
- Cost and Schedule Management

Financial Model



- Construction Funding
- Long-term Financing
- Revenue Streams (i.e. sales tax)
- Debt Repayment

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Final Feasibility Study cost estimate sets baseline funding requirements

Final Feasibility Report and
Environmental Impact Statement

Fargo-Moorhead Metropolitan Area
Flood Risk Management

July 2011



US Army Corps
of Engineers

Prepared by:
U.S. Army Corps of Engineers
1300 Polk Avenue, Suite 100
St. Paul, Minnesota 55102-3475

LPP TOTAL PROJECT COST SUMMARY								
PROJECT: Fargo Moorhead Metro Feasibility Study								
LOCATION: Red River of the North Basin								
ACCOUNT NUMBER	FEATURE DESCRIPTION	Estimated Cost (\$K)	Contingency (\$K)	Contingency (%)	Total First Cost (\$K)	FULLY FUNDED ESTIMATE		
						Estimated Cost (\$K)	Contingency (\$K)	Fully Funded plus Contingency (\$K)
01	Lands & Damages	220,930	57,443	26%	278,373	238,338	61,985	300,304
02	Relocations	122,453	31,838	26%	154,291	137,125	35,553	172,778
06	Fish and Wildlife Facilities	49,198	12,791	26%	61,987	54,544	14,103	68,947
08	Roads, Relocations and Bridges	47,650	12,390	26%	60,040	51,606	13,417	65,023
09	Channels & Canals	622,049	161,732	26%	783,779	693,331	180,268	873,597
11	Levees and Floodwalls	113,837	29,598	26%	143,435	131,821	34,196	165,715
14	Recreation Facilities	23,650	6,149	26%	29,799	26,308	6,840	33,148
50	Planning, Engineering and Design	145,913	37,937	26%	183,850	175,333	45,586	220,919
51	Construction Management	68,087	17,703	26%	85,790	85,679	22,277	107,956
	Total	1,413,747	367,875	26%	1,781,624	1,593,486	414,308	2,007,792

All costs in thousands (\$1,000)

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July 2011



US Army Corps
of Engineers

Prepared by:
U.S. Army Corps of Engineers
St. Paul District
1300 Flood Control Center, Suite 100
St. Paul, Minnesota 55102-0473

Without Escalation:

First Cost:	\$1.414B
Contingency	<u>\$0.367B</u>
Total First Cost	\$1.781B

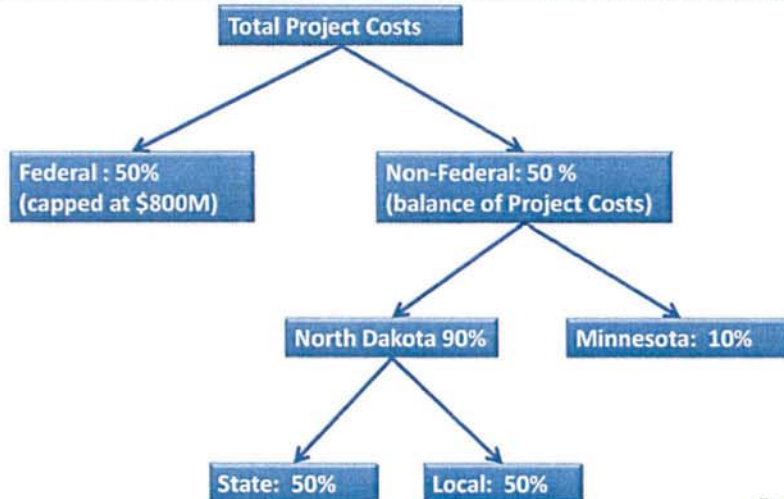
With Escalation:

First Cost	\$1.594B
Contingency	<u>\$0.414B</u>
Total First Cost	\$2.008B

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Current funding allocations

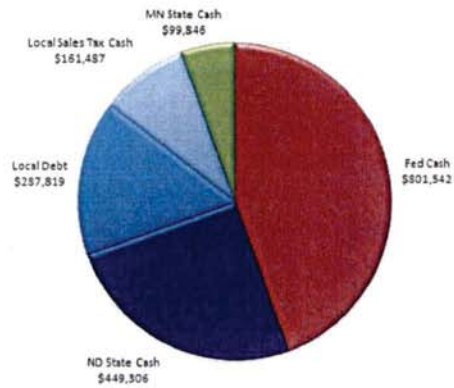


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Feasibility Study funding allocations

FM Metro Diversion Project (Excluding Debt Service)
Funding by Source (\$000)

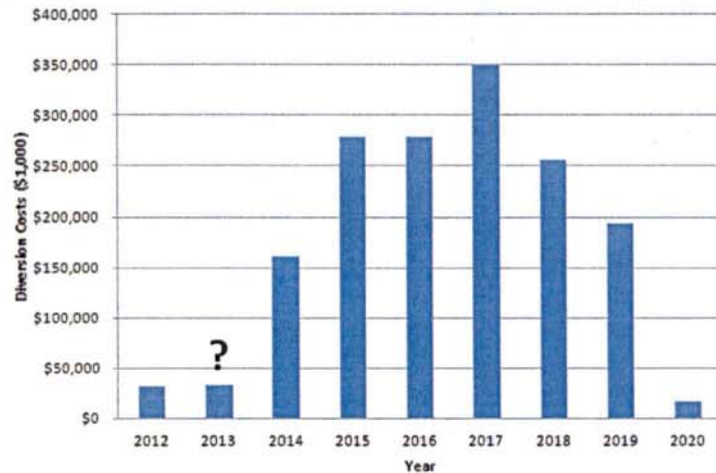


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\$1.8B Project Cost Scenario



Annual cost requirements must be financed

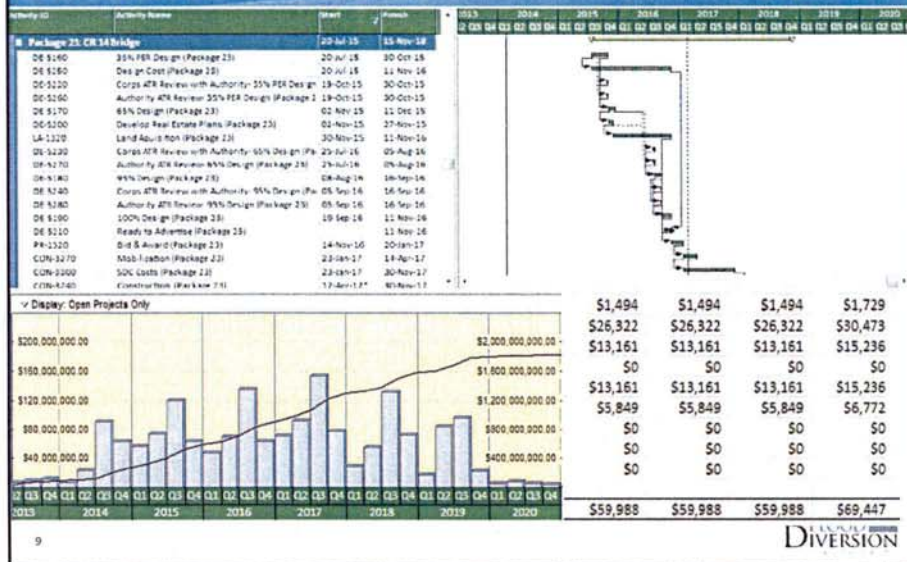


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\$1.8B Project Cost Scenario

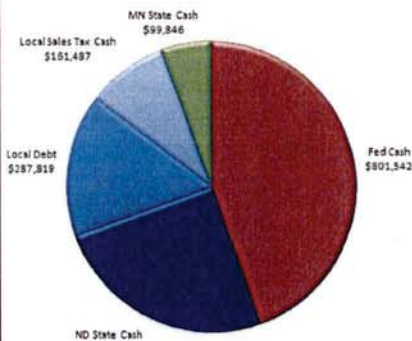


Cost-loaded schedule defines logical sequence of project activities in terms of time and money



Financial model allows "what if" scenarios

FM Metro Diversion Project (Excluding Debt Service)
Funding by Source (\$000)



Scenario Selection

Estimated \$2.0 billion
Redistributed \$1.6 billion
Estimated \$1.6 billion
Estimated \$1.4 billion

Full Fed Reduced Fed

Fed Contribution: 802

Adjust Contribution

2019 Level of Expenditure (\$M)

33

Additional Triggers

Adjust Debt & Sales Tax

Sales Tax Expires: 2048

Escalation Rate: 4.00%

Accelerate Land Acq

Apply Initiatives

Funding Options

Full Bonding

Bank Float with Bonding

Bank Float with LT Debt

Bank of ND Lending Limit (\$M)

750

Model Results (\$000)

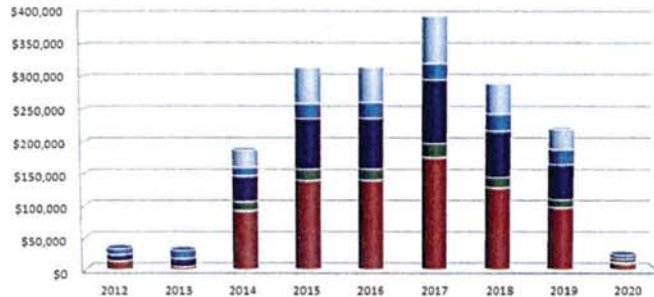
Total Bank Debt	\$ -
Total Bond Debt (*)	\$ 322,358
Max Debt Service	\$ 24,117
Cost of Financing	\$ 265,530
Cost / Total Debt	82%
Unmet Debt Serv	\$ (798,713)
Annualized Assmt	\$ -

(*) Includes cost of issuance and debt reserve

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Financial model allows "what if" scenarios

FM Metro Diversion Project
Annual Contribution by Entity (\$000)



	2012	2013	2014	2015	2016	2017	2018	2019	2020
Local ND Debt	\$0	\$0	\$27,169	\$55,261	\$54,532	\$75,313	\$46,163	\$31,361	\$0
Local ND (sales tax)	\$9,488	\$12,600	\$13,143	\$22,877	\$23,806	\$24,772	\$25,778	\$23,196	\$5,826
ND State Cash	\$9,488	\$12,600	\$40,312	\$78,137	\$78,338	\$98,086	\$71,941	\$54,577	\$5,826
MN State Cash	\$0	\$0	\$13,867	\$17,364	\$17,408	\$21,797	\$15,987	\$12,128	\$1,295
Fed Cash	\$14,167	\$5,000	\$92,152	\$139,394	\$139,752	\$174,980	\$128,340	\$97,364	\$10,394

Scenario Selection

Estimated \$2.0 billion
☒ Redistributed \$1.3 billion
 Estimated \$1.6 billion
 Estimated \$1.4 billion

Full Fed Reduced Fed

Fed Contribution: 802

Adjust Contribution

2013 Level of Expenditure (\$M)

33

Funding Options

☐ Full Bonding
☒ Bank Float with Bonding
☐ Bank Float with LT Debt

Bank of ND Lending Limit (\$M)

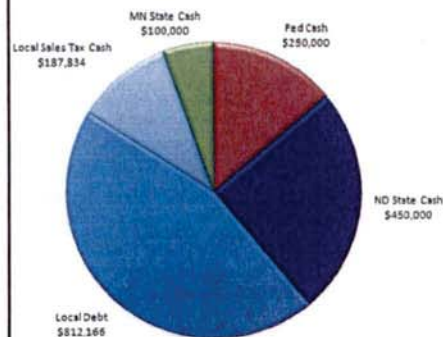
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Financial model allows "what if" scenarios

FM Metro Diversion Project (Excluding Debt Service)
Funding by Source (\$000)



Scenario Selection

Estimated \$2.0 billion
☒ Redistributed \$1.3 billion
 Estimated \$1.6 billion
 Estimated \$1.4 billion

Full Fed Reduced Fed

Fed Contribution: 250

Adjust Contribution

2013 Level of Expenditure (\$M)

33

Funding Options

☐ Full Bonding
☐ Bank Float with Bonding
☒ Bank Float with LT Debt

Bank of ND Lending Limit (\$M)

750

Additional Triggers

Adjust Debt & Sales Tax

Sales Tax Expires: 2048

Escalation Rate: 4.00%

☐ Accelerate Land Acq

☒ Apply Inflation

Model Results (\$000)

Total Bank Debt \$ 723,806
 Total Bond Debt (*) \$ 172,660
 Max Debt Service \$ 56,568
 Cost of Financing \$ 652,880
 Cost / Total Debt 73%
 Unmet Debt Svc \$ (27,706)
 Annualized Assm't \$ -

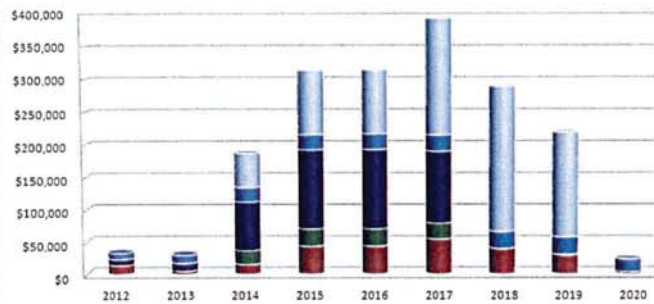
(*) includes cost of issuance and debt reserve

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Financial model allows “what if” scenarios

FM Metro Diversion Project
Annual Contribution by Entity (\$000)



	2012	2013	2014	2015	2016	2017	2018	2019	2020
Local ND Debt	\$0	\$0	\$52,797	\$98,423	\$97,806	\$178,888	\$222,402	\$161,454	\$396
Local ND (sales tax)	\$9,488	\$12,600	\$21,984	\$22,877	\$23,806	\$24,772	\$25,778	\$26,825	\$19,704
ND State Cash	\$9,488	\$12,600	\$74,781	\$121,300	\$121,612	\$110,219	\$0	\$0	\$0
MN State Cash	\$0	\$0	\$21,527	\$26,956	\$27,025	\$24,493	\$0	\$0	\$0
Fed Cash	\$14,167	\$5,000	\$15,553	\$43,477	\$43,588	\$54,576	\$40,029	\$30,368	\$3,242

Scenario Selection

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Estimated \$1.6 billion
Estimated \$1.4 billion

Full Fed Reduced Fed

Fed Contribution: 250

Adjust Contribution

2013 Level of Expenditure (\$M)

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Funding Options

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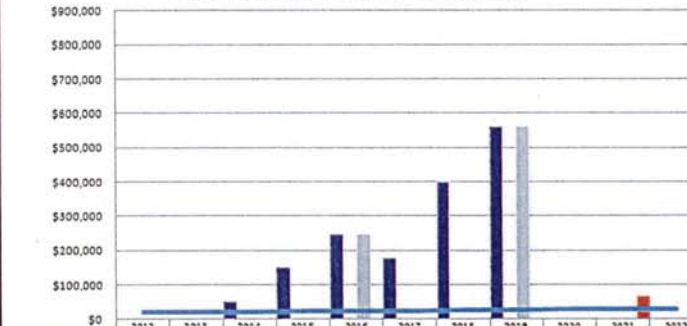
Bank of ND Lending Limit (\$M)

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Authority goals drive implementation strategy Case example: debt service

FM Metro Diversion Project
Short and Long Term Debt Requirements (\$000)



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Short Term Debt	\$0	\$0	\$52,797	\$151,320	\$248,026	\$176,888	\$401,190	\$662,744	\$0	\$0	\$0
Bank Loan	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bond Issuance	\$0	\$0	\$0	\$0	\$248,026	\$0	\$0	\$662,744	\$0	\$0	\$0
Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70,921	\$70,921
Local Sales Tax	\$20,302	\$21,126	\$21,984	\$22,877	\$23,806	\$24,772	\$25,778	\$26,825	\$27,814	\$28,847	\$30,227

Scenario Selection

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Adjust Contribution

2013 Level of Expenditure (\$M)

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Funding Options

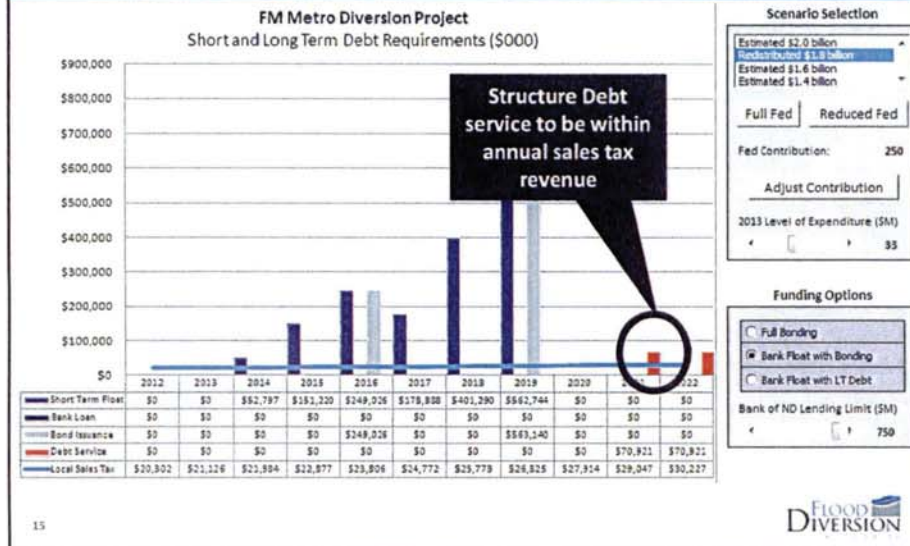
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Bank of ND Lending Limit (\$M)

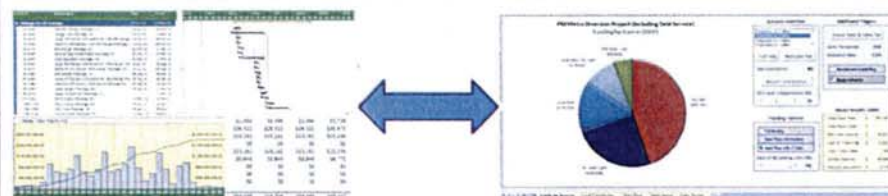
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Authority goals drive implementation strategy Case example: debt service



Initial funding scenarios demonstrate the Diversion Project is locally affordable, if:



- Bank or other cash float (short-term loan) during construction
- Long term financing through bonds or bank loan
- Create special assessment district on benefiting properties or continue current sales tax in the future
- Aggressively manage construction cost and schedule

Questions/Discussion